What is claimed is:

1. A light projector, comprising:

a light source;

a reflector for reflecting light from the light source into a beam of light, the reflector having a base portion which is heat conductive, and having a coating applied thereto which reflects visible light and absorbs infra-red light;

a heat sink in contact with the base portion.

2. The light projector of claim 1, wherein the base portion is metal.

3. The light projector of claim 1, wherein the base portion is aluminum.

4. The light projector of claim 1, wherein the coating is a dielectric material.

5. The light projector of claim 1, wherein the heat sink is comprised of a plurality of heat sink fins.

6. The light projector of claim 1, wherein the reflector is elliptical in shape.

7. The light projector of claim 1, wherein the reflector is spherical in shape.

8. The light projector of claim 1, wherein the reflector is a parabolic reflector.

9. The light projector of claim 1, wherein the reflector includes an elliptical reflector disposed behind the light source and a spherical reflector disposed in front of the light source and opposite the elliptical reflector.

10. A light projector, comprising:

an elliptical reflector;

a first spherical retro-reflector, the first retro-reflector having an first aperture formed therein, the first aperture having a first diameter and a first center-point;

a second spherical retro-reflector located between the elliptical reflector and the first retro-reflector, the second retro-reflector having a second aperture formed therein, the second aperture having a second diameter and a second center-point, the second diameter smaller than the first diameter, the first and second center-points lying along a common axis;

a light source, the light source located at a foci of the elliptical reflector, the light source lying along the common axis, the elliptical reflector reflecting light emitted by the light source, the reflected light passing through the first and second apertures, the first and second retro-reflectors being positioned so as to reflect light emitted by the light source back towards the light source.

11. The light projector according to claim 10, wherein the elliptical reflector, the first retro-reflector, and the second retro-reflector are each comprised of a base portion which is heat conductive, the base portion having a coating applied thereto which reflects visible light and absorbs infra-red light, and wherein the respective base portion of each of the elliptical reflector, the first retro-reflector, and the second retro-reflector are in contact with a heat sink.

12. The light projector according to claim 11, wherein the projector does not include a fan.

13. The light projector of claim 11, wherein the base portion is metal.

14. The light projector of claim 11, wherein the base portion is aluminum.

15. The light projector of claim 11, wherein the coating is a dielectric material.

16. The light projector of claim 11, wherein the heat sink is comprised of a plurality of heat sink fins.

17. The light projector of claim 10, further comprising a lens and a color changing apparatus, the color changing apparatus disposed between the first retro-reflector and the lens.

18. The light projector of claim 17, wherein the color changing apparatus includes a cyan color wheel, a magenta color wheel, and a yellow color wheel, and wherein the cyan, yellow, and magenta color wheels are independently rotatable to cause light passing through the color changing apparatus along the common axis to change to a desired color.

19. The light projector of claim 10, further comprising a strobe wheel disposed between the first retro-reflector and the lens, the strobe wheel including a plurality of apertures disposed about its periphery, the strobe wheel being rotatable so that the plurality of apertures successively pass through the common axis.

20. The light projector of claim 17, further comprising a strobe wheel disposed between the first retro-reflector and the lens, the strobe wheel including a plurality of apertures disposed about its periphery, the strobe wheel being rotatable so that the plurality of apertures successively pass through the common axis.

21. The light projector of claim 18, wherein the color changing apparatus includes a variable color temperature wheel, which is independently rotatable.

22. The light projector of claim 10, further comprising a beam shaping apparatus disposed along the common axis.

23. The light projector of claim 17, further comprising a beam shaping apparatus disposed between the lens and the color changing apparatus.

24. The light projector of claim 22, wherein the beam shaping apparatus comprises a first beam shaping wheel and a second beam shaping wheel, the first beam shaping wheel having a

first plurality of apertures disposed about its periphery, at least one of said apertures having a first cylindrical lens disposed therein, the second beam shaping wheel having a second plurality of apertures disposed about its periphery, at least one of said apertures having a second cylindrical lens disposed therein, the first beam shaping wheel being rotatable to selectively pass each of the first plurality of apertures through the common axis, the second beam shaping wheel being rotatable to selectively pass each of the second plurality of apertures through the common axis.

25. The light projector of claim 22, wherein the first and second beam shaping wheels are independently rotatable.

26. The light projector of claim 25, wherein each of the first and second cylindrical lenses is rotatable within its respective aperture.

27. The light projector of claim 26, wherein the first and second cylindrical lenses are disposed within respective carriers, and the carriers are rotatably mounted within respective apertures.

28. The light projector of claim 27, further comprising a first motor coupled to the first beam shaping wheel, a second motor coupled to the first cylindrical lens carrier, a third motor coupled to the second beam shaping wheel, and a fourth motor coupled to the second cylindrical lens carrier.

29. An automated lighting fixture, comprising

a light beam projector including a light source disposed within a housing;

a yoke;

a base, the base including a first motor for rotating the yoke in a horizontal plane, the yoke including a pair of vertically extending arms coupled to the housing, the light projector being rotatably secured to the vertically extending arms so that the light projector is movable radially about an axis passing through the vertically extending arms, the yoke including a

horizontally extending member which joins the vertically extending arms, the horizontally extending member having a length and width which is substantially equal to the length and width of the base;

a second motor, disposed in either the base or in one of the vertically extending arms, and coupled to the light projector for rotating the light projector radially about the axis.

30. The fixture of claim 29, wherein the housing, the base, and the yoke are fabricated from a carbon fiber composite material.

31. A light projector, comprising:

a light beam source for projecting a beam of light along an axis;

a beam shaping apparatus disposed in the path of the beam of light, the beam shaping apparatus including a first beam shaping wheel and a second beam shaping wheel, the first beam shaping wheel having a first plurality of apertures disposed about its periphery, at least one of said apertures having a first cylindrical lens disposed therein, the second beam shaping wheel having a second plurality of apertures disposed about its periphery, at least one of said apertures having a second cylindrical lens disposed therein, the first beam shaping wheel being rotatable to selectively pass each of the first plurality of apertures through the axis, the second beam shaping wheel being rotatable to selectively pass each of the second plurality of apertures through the axis.

32. The light projector of claim 31, wherein the first and second beam shaping wheels are independently rotatable.

33. The light projector of claim 32, wherein each of the first and second cylindrical lenses is rotatable within its respective aperture.

34. The light projector of claim 33, wherein the first and second cylindrical lenses are disposed within respective carriers, and the carriers are rotatably mounted within respective

apertures.

35. The light projector of claim 34, further comprising a first motor coupled to the first beam shaping wheel, a second motor coupled to the first cylindrical lens carrier, a third motor coupled to the second beam shaping wheel, and a fourth motor coupled to the second cylindrical lens carrier.

36. The light projector of claim 17, wherein the lens is a fresnel lens.

37. A light projector including

a light beam source for projecting a beam of light along an axis;

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a strobe wheel disposed between the first retro-reflector and the lens,

a motor coupled to the strobe wheel, the strobe wheel including a plurality of apertures disposed about its periphery, the strobe wheel being rotatable by the motor so that the plurality of apertures successively pass through the axis.

38. A wash light projector, comprising:

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a light beam source for projecting a beam of light along an axis;

a beam shaping apparatus disposed in the path of the beam of light, the beam shaping apparatus including a first beam shaping wheel and a second beam shaping wheel, the first beam shaping wheel having a first plurality of apertures disposed about its periphery, at least one of said apertures having a first asymmetrical lens disposed therein, the second beam shaping wheel having a second plurality of apertures disposed about its periphery, at least one of said apertures having a second asymmetrical lens disposed therein, the first beam shaping wheel being rotatable to selectively pass each of the first plurality of apertures through the axis, the second beam shaping wheel being rotatable to selectively pass each of the second plurality of apertures through the axis.

39. The wash light projector of claim 38, wherein the first and second beam shaping wheels

are independently rotatable.

40. The wash light projector of claim 39, wherein each of the first and second asymmetrical lenses is rotatable within its respective aperture.

41. The wash light projector of claim 40, wherein the first and second asymmetrical lenses are disposed within respective carriers, and the carriers are rotatably mounted within respective apertures.

42. The wash light projector of claim 41, further comprising a first motor coupled to the first beam shaping wheel, a second motor coupled to the first asymmetrical lens carrier, a third motor coupled to the second beam shaping wheel, and a fourth motor coupled to the second asymmetrical lens carrier.

43. The wash light projector of claim 38, wherein at least one of the asymmetrical lenses is a cylindrical lens.

44. The light projector of claim 17 wherein the lens is a pebble convex lens.

45. The light projector of claim 23, wherein the lens is a plano convex lens, and diffusion is introduced between the beam shaping apparatus and the plano convex lens.

46. A light projector comprising:

a light source projecting a beam of light;

an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.

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47. The light projector of claim 46, wherein the optical element is a lens.

48. The light projector of claim 46, wherein the plurality of sub-elements are radial sections of a plano convex lens.

49. The light projector of claim 48, wherein the plurality of sub-elements, when in the second position, together form a circular plano convex lens.

50. The light projector of claim 49, wherein the plurality of sub-elements includes eight sub-elements.

51. The light projector of claim 46, further comprising

a base having an opening formed therein, wherein the beam of light passes through the opening, and wherein the optical sub-elements are movably secured to the base.

52. The light projector of claim 51, wherein the optical sub-elements are movable between the first, second and intermediate positions in a direction parallel to a face of the opening.

52. The light projector of claim 51, wherein the optical sub-elements are movable between the first, second and intermediate positions in a direction substantially perpendicular to the beam of light passing through the opening.

53. The light projector of claim 46, wherein wherein the plurality of sub-elements includes two sub-elements.

54. The light projector of claim 46, wherein the plurality of sub-elements includes three sub-elements.

55. The light projector of claim 51, wherein the plurality of sub-elements are plano convex lens

sub-elements.

56. The light projector of claim 55, wherein the plurality of sub-elements, when in the second position, together form a circular plano convex lens.

57. The light projector of claim 56, wherein the plurality of sub-elements includes eight sub-elements.

58. The light projector of claim 46 wherein the optical element is selected from the group consisting of double-convex lens, plano-concave lens, double-concave lens, aspheric lens, condenser lens, fresnel lens, meniscus lens, lenticular arrays, ground glass lens, diffusing lens, diffraction grating, frosted material and a polarizing lens.

59. The light projector of claim 51 wherein the optical element is selected from the group consisting of double-convex lens, plano-concave lens, double-concave lens, aspheric lens, condenser lens, fresnel lens, meniscus lens, lenticular arrays, ground glass lens, diffusing lens, diffraction grating, frosted material and a polarizing lens.

60. A light projector comprising:

a light source projecting a beam of light;

a plurality of optical sub-elements each movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

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61. The light projector of claim 60, wherein the plurality of sub-elements are plano convex lens sub-elements.

62. The light projector of claim 61, wherein the plurality of sub-elements, when in the second position, together form a circular plano convex lens.

63. The light projector of claim 62, wherein the plurality of sub-elements includes eight sub-elements.

64. A light projector comprising:

a light source projecting a beam of light;

a base having an opening formed therein, the beam of light positioned to pass through the opening;

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a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

65. The light projector of claim 64, wherein the optical sub-elements are movable between the first, second and intermediate positions in a direction parallel to a face of the opening.

66. The light projector of claim 64, wherein the optical sub-elements are movable between the first, second and intermediate positions in a direction substantially perpendicular to the beam of light passing through the opening.

67. The light projector of claim 64, wherein the plurality of sub-elements are plano convex lens sub-elements.

68. The light projector of claim 64, wherein the plurality of sub-elements, when in the second position, together form a circular plano convex lens.

69. The light projector of claim 68, wherein the plurality of sub-elements includes eight sub-elements.

70. The light projector of claim 60 wherein the optical sub-elements are selected from the group consisting of double-convex lens, plano-concave lens, double-concave lens, aspheric lens, condenser lens, fresnel lens, meniscus lens, lenticular arrays, ground glass lens, diffusing lens, diffraction grating, frosted material and a polarizing lens.

71. The light projector of claim 64 wherein the optical sub-elements are selected from the group consisting of double-convex lens, plano-concave lens, double-concave lens, aspheric lens, condenser lens, fresnel lens, meniscus lens, lenticular arrays, ground glass lens, diffusing lens, diffraction grating, frosted material and a polarizing lens.

72. The light projector of claim 45, wherein the light projector is a wash light.

73. The light projector of claim 60, wherein the light projector is a wash light.

74. The light projector of claim 64, wherein the light projector is a wash light.

75. The light projector of claim 46, further comprising one or more motors, the optical sub-elements movable via the one or more motors.

76. The light projector of claim 60, further comprising one or more motors, the optical sub-element movable via the one or more motors.

77. The light projector of claim 64, further comprising one or more motors, the optical sub-element movable via the one or more motors.

78. The light projector of claim 1, further comprising a beam size apparatus including an optical

element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.

79. The light projector of claim 10, further comprising a beam size apparatus including an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.

80. The light projector of claim 31, further comprising a beam size apparatus including an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.

81. The light projector of claim 37, further comprising a beam size apparatus including an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements.

82. The light projector of claim 65, wherein the optical sub-elements are movable within tracks formed in the base.

83. The light projector of claim 65, wherein the optical sub-elements are movable within tracks formed through the base.

84. The light projector of claim 38, further comprising a beam size apparatus including an optical element movable between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element, wherein the optical element is comprised of a plurality of radially sectioned sub-elements..

85. The light projector of claim 1, further comprising

a base having an opening formed therein, the beam of light positioned to pass through the opening;

a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

86. The light projector of claim 10, further comprising:

a base having an opening formed therein, the beam of light positioned to pass through the opening;

a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

87. A beam size sub-assembly comprising:

a base having an opening formed therein;

a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which a beam of light passing through the opening does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

88. The light projector of claim 31, further comprising

a base having an opening formed therein, the beam of light positioned to pass through the opening;

a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

87. The light projector of claim 37, further comprising:

a base having an opening formed therein, the beam of light positioned to pass through the opening;

a plurality of optical sub-elements movably secured to the base, each sub-element movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

88. The light projector of claim 38, further comprising

a base having an opening formed therein, the beam of light positioned to pass through the opening;

a plurality of optical sub-elements movably secured to the base, each sub-element

movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

89. The light projector of claim 1, further comprising:

a plurality of optical sub-elements each movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

90. The light projector of claim 10, further comprising:

a plurality of optical sub-elements each movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

91. The light projector of claim 46, further comprising:

a second optical element disposed between the light source and the optical element, the second optical element movable between a first position in which the beam of light does not impinge upon the second optical element, a second position in which substantially all of the beam of light impinges upon the second optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the second optical element, wherein the second optical element is comprised of a plurality of radially sectioned sub-elements.

92. The light projector of claim 31, further comprising:

a plurality of optical sub-elements each movable between a first position in which the

beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

93. The light projector of claim 37, further comprising:

a plurality of optical sub-elements each movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

94. The light projector of claim 38, further comprising:

a plurality of optical sub-elements each movable between a first position in which the beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

95. A method for varying the beam size of a projected beam of light comprising:

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projecting a beam of light;

moving an optical element between a first position in which the beam of light does not impinge upon the optical element, a second position in which substantially all of the beam of light impinges upon the optical element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical element.

96. A method for varying the beam size of a projected beam of light comprising:

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projecting a beam of light;

moving each of a plurality of optical sub-elements between a first position in which the

beam of light does not impinge upon the optical sub-element, a second position in which substantially all of the beam of light impinges upon the optical sub-element, and a plurality of intermediate positions in which a portion of the beam of light impinges upon the optical sub-element.

97. The light projector of claim 75, further comprising a remote control console, and wherein the motor is controlled via the remote control console.

98. The light projector of claim 76, further comprising a remote control console, and wherein the motor is controlled via the remote control console.

99. The light projector of claim 77, further comprising a remote control console, and wherein the motor is controlled via the remote control console.

100. The light projector of claim 37, further comprising a remote control console, and wherein the motor is controlled via the remote control console.

101. The light projector of claim 42, further comprising a remote control console, and wherein the first motor, second motor, third motor, and fourth motor are controlled via the remote control console.

102. The automated lighting fixture of claim 29, further comprising a remote control console, and wherein the first motor and second motor are controlled via the remote control console.

103. The automated lighting fixture of claim 29, wherein the base and the horizontally extending member have a circular outer surface.